# Planning and project management computer

Theme 3: Projects I + D + I

Master in Computer Engineering
University of Granada

### goals

 Know different calls for national and international projects for R + D + I.

 See that there are projects aimed at promoting research and other focused on development cooperation, which can also lead research.

 Knowing the steps to take to order a project with these characteristics and entities that finance them.

### calls Andalucía

## R & D by research teams under the ERDF Operational Program Andalusia 2014-2020

- Knowledge Projects "frontier" and development of emerging technologies.
- Knowledge projects oriented to the challenges of Andalusian society.
- Program promoting participation in the Framework Program of the European Union Horizon 2020 (H2020).

## R + D + I, the Andalusian Research, Development and Innovation (Old Projects of Excellence) 2018:

- The above types plus:
- Research projects in collaboration with the productive fabric.

## National calls for Projects I + D + I

State Plan of Scientific and Technical Research and Innovation 2017 2020 Ministry of Science, Innovation and Universities.

\*\*the R + D + i State program Knowledge Generation and Strengthening Scientific and Technological: Knowledge generation, equipment, networks, centers of excellence and units

• State Talent Promotion Program and Employability in R + D + i : training, integration, mobility (predoctoral)

\*\*State Program R & D + i Oriented Challenges

Society: Research Challenges



#### 1. KNOWLEDGE GENERATION

Research projects without previously defined thematic orientation which are motivated by scientific curiosity and have as its primary objective the advancement of knowledge, regardless of time horizon and scope thereof.

Consolidated equipment, IP relevant

### Projects I + D + I

Designed to finance exploration heterodox and radically innovative ideas.

promote **scientific curiosity and intellectual boldness** fundamental and applied research in promoting imaginative and radical proposals for research whose viability could be considered low in conventional programs because they clash with established ideas in their field, and **risky technological proposals seeking "proof of concept"**.

The objectives of the proposals are to make a re-evaluation of established paradigms and accepted, w projection different areas

scientific or technical, looking for new solutions and applications.

#### **Examples:**

"Bio-functional interfaces living"

"Exploring a technological proposal for mass and low-cost production of glucose monitors by non-invasive sensors acetone CMOSMEMS"

### Projects I + D + I

#### 2. THE COMPANY CHALLENGES

Experimental work and theoretical research specifically oriented towards solving problems in any of the eight

great societal challenges:

- 1. "Health, demographic change and wellbeing"
- 2. "Security, food quality; productive and sustainable farming; sustainability of natural resources, marine and maritime research "
- 3. "safe, sustainable and clean energy"
- 4. "smart, sustainable and integrated transport"
- 5. "Action on climate change and efficient use of resources and raw materials"
- 6. "changes and social innovations"
- 7. "Economy and Digital Society"
- 8. "safety, security and defense."

### Projects I + D + I

Types A (young researchers and JIN) and Type B (consolidated researchers). JIN: one young IP, with or without ties to the University.

The B type can be coordinated or individual, the type individual.

They can be works **experimental or theoretical** undertaken primarily to acquire new knowledge about **und fundamentals** of phenomena and observable facts, **although there are no immediate prospect of** direct practical application.

Must be a breakthrough in the field in that fall.

Promoting research projects led by young researchers with promising scientific careers and beginners in project management.

It is intended to fund research projects that are **relevant**, **ambitious**, **with high socioeconomic impact** and **clear international projection**, avoiding fragmentation of research groups and promoting synergies and **Teams Association** in a single project.

#### **Example:**

"Advanced Techniques and Methods for Adaptation to Context Sensitive Software (TEMADAPT)"

### Projects I + D + I

#### **Endpoints:**

**Knowledge Generation Projects and Challenges** 

	Modalida (proyectos ti		Modalida (proyectos ti y B	ipo A, JIN	Modalidad RTI (proyectos tipo RTA)	
Criterio	Valoración	Umbral	Valoración	Umbral	Valoración	Umbral
Calidad y     viabilidad de la     propuesta	0-55 40		0-40 30		0-40	30
1.1 Calidad	/iabilidad 0-15 -		0-30 - 0-10 - 0-30 20		0-30 0-10	-
1.2 Viabilidad						
Equipo de investigación					0-30	20
3. Impacto	0-15 5		0-30 10 0-20 -		0-30	10
3.1. Impacto científico- técnico	0-10 -				0-15	-
3.2 Impacto social y económico	0-5	-	0-10	-	0-15	-

Current research framework program and innovation in Europe. Fixed bases different calls in those financed:

- Projects Collaborative CPs: (1) RIA: research and innovation, (2) IA: innovation, (3) SME: companies
- Actions of coordination and support CSA (administrations)
- Awards and competitions
- General information http://eshorizonte2020.es/
- participants http://ec.europa.eu/research/participants/portal/
- search for partners and projects, possibility of offering <a href="https://cordis.europa.eu/partners/web/guest">https://cordis.europa.eu/partners/web/guest</a>
- Current announcements and dates https://www.zabala.eu/en/news/h2020calendar-main-open-c

#### societal Challenges

- Health, demographic change and wellbeing
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, environment, resource efficiency and raw materials
- Europe in a changing world inclusive, innovative and reflective
   Societies
- Secure societies Protecting freedom and security of Europe and Its Citizens

- those of **increased funding** ( € 80,000m for the period 2014-2020: € 13M per project).
- List of **specific topics** to investigate.
- **Support for preparation and follow-up** a legal, administrative and financial level.
- Work groups (consortiums), a coordinator and trained by entities (partners) from different countries (5-20 approx).
- Partners can be: universities, research centers, companies, groups of end users.
- Should **make sense to establish a project at European level,** so that by joining forces they can: validate hypotheses, and share goals adaptations problem solving in different European countries.
- They are requested **exploitable results as products**.

#### **Evaluation criteria**:

- scientific and technological quality: Participants concept, objectives and work plan
- **Implementation:** work of the participants, resources, budget
- **Impact**: expected contribution to objectives and described in the call, dissemination and exploitation plans, benefits provided in the European Union to social, economic and technological level.

#### other financing

#### **Excellent Science**

- Future and Emerging Technologies: Graphene, Human Brain Project,
   Quantum simulation, New Approaches to Cognitive Systems
- Marie Sklodowska-Curie actions: mobility grants
- Research infrastructures: buildings, equipment

#### **Industrial Leadership**

- Leadership in Enabling and Industrial Technologies (LEIT)
- Access to risk finance
- Innovation in SMEs

### R + D + I in the UGR

More information:

Office of Research:

http://investigacion.ugr.es/pages/proyectos

Results Transfer Office (TTO): http://otri.ugr.es/

**International Project Office (OFPI):** 

http://www.ugr.es/~ofpi/

### Cooperation projects, networks, ...

#### Cooperation projects:

- Erasmus +
- Creative Europe
- Europe Aid
- interreg
  - interreg Europe
  - interreg Sudoe
- PIMA-Andalucía Latin America
- ENI CBCMED Mediterranean Sea Basin Mediterranean Basin

Also networks, associations and foundations with international organizations

## Networks Universities and International Associations

- Coimbra group
- European University Association (EUA)
- The Association of Arab and European Universities (AEUA)
- International Association of Universities (IAU)
- European Association for International Education (EAIE)
- Iberoamerican University Postgraduate Association (AUIP)
- Sectorial Commission for Internationalization and Cooperation of the Spanish Universities of CRUE
- Union of Mediterranean Universities (UNIMED)
- Tordesillas group
- Community of Mediterranean Universities (CUM)
- European Association of Erasmus-Coordinators European Association of Erasmus Coordinators (EAEC)
- European Language Council (CEL / ELC)
- EMUNI University
- NAFSA
- Managers Association of International Education (IAEA)
- Observatory Magna Char

## Cooperation projects and networks

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Vice President for Internationalization:

https://internacional.ugr.es/pages/proyectos/programas\_index

https://internacional.ugr.es/pages/asoc\_redes

CICODE (Center initiatives for cooperation and development of the UGR). own plan:

http://cicode.ugr.es/pages/plan-propio-cooperacion/plan-propio-decooperacion#\_\_doku\_plan\_p